

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 76060 Date: 11-16-04
 Art Unit: 1752 Phone Number 302-1333 Serial Number: 10/690,217
 Mail Box and Bldg/Room Location: 9D67 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

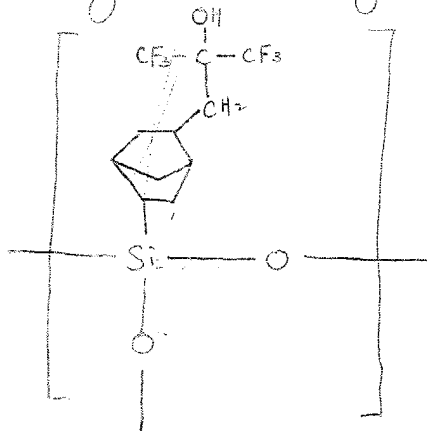
Title of Invention: Photobresists containing Si-polymers
 Inventors (please provide full names): Barclay, George A; Kanagasabapathy,
Subbareddy

Earliest Priority Filing Date: 10-21-03

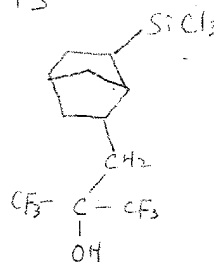
For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search for a polymer
 that comprises the

following repeating unit



For your information,
 starting monomer
 which makes
 this polymer
 is



* This polymer
 is to be used in
 a positive type photoimaging composition
 for photobresist composition

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>US</u>	NA Sequence (#) _____	STN <u>\$ 300.00</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>(4)</u>	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic <u>(3)</u>	Dr. Link _____
Date Completed: <u>11-24-04</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>30</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>(1)</u>	Other _____	Other (specify) _____



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 1713

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28



=> => => fil reg

FILE 'REGISTRY' ENTERED AT 11:34:16 ON 26 NOV 2004
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 24 NOV 2004 HIGHEST RN 788132-72-9
DICTIONARY FILE UPDATES: 24 NOV 2004 HIGHEST RN 788132-72-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d his

(FILE 'HOME' ENTERED AT 09:54:13 ON 26 NOV 2004)

L1 FILE 'LREGISTRY' ENTERED AT 09:54:22 ON 26 NOV 2004
STR

FILE 'HCA' ENTERED AT 09:59:59 ON 26 NOV 2004
E BARKLAY G/AU
E KANAGASABAPATHY S/AU
E BARCLAY, G/AU
L2 43 S E3-E9
E KANAGASABAPATHY S/AU
L3 27 S E3-E9
E BARCLAY, G/AU
E BARCLAY G/AU
L4 0 S E3 AND E7
L5 28 S E3 OR E7
L6 0 S L3 AND L5

FILE 'REGISTRY' ENTERED AT 10:30:53 ON 26 NOV 2004

L7 FILE 'LREGISTRY' ENTERED AT 10:36:53 ON 26 NOV 2004
STR L1

L8 FILE 'REGISTRY' ENTERED AT 10:38:13 ON 26 NOV 2004
0 S L7 SAM
SET COST OFF PERM

L9 FILE 'LREGISTRY' ENTERED AT 10:52:54 ON 26 NOV 2004
STR L7

L10 FILE 'REGISTRY' ENTERED AT 10:59:49 ON 26 NOV 2004
0 S L9

FILE 'HCAPLUS' ENTERED AT 11:03:26 ON 26 NOV 2004

L11 1682 S BARCLAY ?/AU
 L12 91 S KANAGASABAPATHY ?/AU
 L13 9 S L11 AND L12
 SEL L13 2 RN

FILE 'REGISTRY' ENTERED AT 11:12:53 ON 26 NOV 2004

L14 11 S E1-F11
 L15 3 S L9 FUL
 SAV L15 LEE217/A

FILE 'CAOLD' ENTERED AT 11:28:07 ON 26 NOV 2004

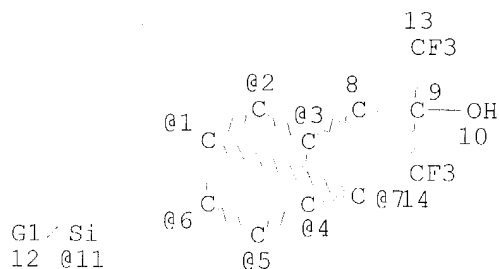
L16 0 S L15

FILE 'HCAPLUS' ENTERED AT 11:28:25 ON 26 NOV 2004

L17 1 S L15

FILE 'REGISTRY' ENTERED AT 11:34:16 ON 26 NOV 2004

=> d l15 que stat
 I,9 STR



VAR G1=CL/O

VPA 11-6/5/2/7/1/4/3 U

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L15 3 SEA FILE=REGISTRY SSS FUL L9

100.0% PROCESSED 167 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.01

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 11:34:56 ON 26 NOV 2004

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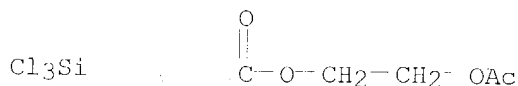
FILE COVERS 1907 - 26 Nov 2004 VOL 141 ISS 22
FILE LAST UPDATED: 24 Nov 2004 (20041124/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 117 1 cbib abs hitstr hitind

L17 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
2004:732316 Document No. 141:251436 Silicon-containing fluorinated polymers and photoresists comprising same. Barclay, George G.; Kanagasabapathy, Subbareddy; Pohlers, Gerhard (Rohm and Haas Electronic Materials, L.L.C., USA). Eur. Pat. Appl. EP 1455229 A1 20040908, 22 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, FE, HU, SK, HR. (English). CODEN: EPXXDW. APPLICATION: EP 2004-250947 20040223. PRIORITY: US 2003-PV449787 20030223.
AB Photoimageable compns. are provided that contain Si-polymers that have a specified ratio of fluorine atoms to Si atoms. Preferred photoresists of the invention can exhibit enhanced resistance to plasma etchants.
IT **753003-49-5DP**, hydrolized
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of silicon-containing fluorinated polymers for photoresists)
RN 753003-49-5 HCAPLUS
CN Bicyclo[2.2.1]heptane-2-carboxylic acid, 6-(trichlorosilyl)-, 2-(acetyloxy)ethyl ester, polymer with 6-(trichlorosilyl)- α,α -bis(trifluoromethyl)bicyclo[2.2.1]heptane-2-ethanol (9CI) (CA INDEX NAME)
CM 1
CRN 753003-48-4
CMF C12 H17 Cl3 O4 Si

Date not good



CM 2

CRN 753003-43-9
CMF C11 H13 Cl3 F6 O Si



IT 753003-44-0P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of silicon-containing fluorinated polymers for photoresists)

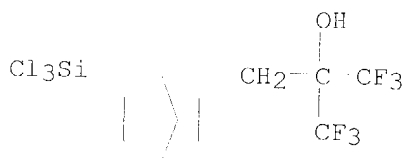
RN 753003-44-0 HCAPLUS

CN Bicyclo[2.2.1]heptane-2-carboxylic acid, 6-(trichlorosilyl)-, 1,1-dimethylethyl ester, polymer with 6-(trichlorosilyl)- α,α -bis(trifluoromethyl)bicyclo[2.2.1]heptane-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 753003-43-9

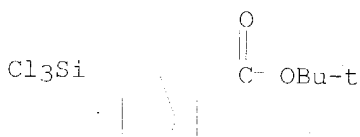
CMF C11 H13 Cl3 F6 O Si



CM 2

CRN 631896-39-4

CMF C12 H19 Cl3 O2 Si



IC ICM G03F007-075

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

IT 287923-92-6P 685901-31-9P 685901-34-2P 753003-49-5DP, hydrolyzed

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of silicon-containing fluorinated polymers for photoresists)

IT 753003-44-0P 753003-46-2P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of silicon-containing fluorinated polymers for photoresists)

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